IN THE CLAIMS:

1. (Twice amended) An electronic pen for recording motion data relating to use of the pen, comprising:

a pen body;

a ball mounted in the pen body;

a sensor in the pen body, located proximate the ball, for detecting motion of the ball and converting the motion into corresponding electronic signals;

a memory in the pen body, electronically coupled to the sensor, for receiving the electronic signals and storing corresponding data related to the motion, the data including data points related to positions of the ball and enabling extrapolation to generate lines representing the motion of the ball; and

a circuit, electronically coupled to the sensor and the memory for sampling the sensor at a particular rate and controlling transmission of the corresponding electronic signal from the sensor to the memory, the circuit including a timer for determining the particular rate at which the sensor is sampled.

2. (Unchanged) The electronic pen of claim 1, further including a removeable ink cartridge, disposed within the pen body, for applying ink to the ball.

3. (Unchanged) The electronic pen of claim 1, further including a port, located on the pen body and electronically coupled to the memory, for use in transferring the data from the memory to an external device.

Please cancel claim 4.

5. (Unchanged) The electronic pen of claim 1, further including a module for receiving the data and for converting the data into a visual representation of the motion of the ball.

6. (Unchanged) The electronic pen of claim 5, further including a module for storing the visual representation.

7. (Unchanged) The electronic pen of claim 1 wherein the sensor includes dual sensors for detecting directions from which orthogonal ball motions can be reconstructed.

8. (Unchanged) The electronic pen of claim 7 wherein the memory stores as the data coordinates representing the directions from which the orthogonal ball motions can be reconstructed.

9. (Unchanged) The electronic pen of claim 1 wherein the memory stores an indication of a set of the motion data and a default location for a start of the corresponding motion.

10. (Unchanged) The electronic pen of claim 1 wherein the memory comprises an atomic resolution storage memory.

11. (Twice Amended) A method for recording motion data relating to use of a pen having a pen body, a ball mounted in the pen body, a memory, and a sensor located proximate the ball, comprising:

detecting motion of the ball using the sensor;

sampling the sensor at a particular rate using a circuit electronically coupled to the sensor and to the memory, the circuit including a timer for determining the particular rate at which the sensor is sampled;

converting the motion into corresponding electronic signals;

receiving the electronic signals;

controlling transmission of the electronic signals from the sensor to the memory using the circuit; and

storing in the memory, based upon the electronic signals, corresponding data related to the motion, the data including data points related to positions of the ball and enabling extrapolation to generate lines representing the motion of the ball.

12. (Unchanged) The method of claim 11, further including providing a removeable ink cartridge, disposed within the pen body, for applying ink to the ball.

13. (Unchanged) The method of claim 11, further including electronically transferring the data from the memory to an external device.

Please cancel claim 14.

15. (Unchanged) The method of claim 11, further including: receiving the data; converting the data into a visual representation of the motion of the ball.

16. (Unchanged) The method of claim 15, further including storing the visual representation.

17. (Unchanged) The method of claim 11 wherein the detecting step includes using dual sensors for detecting directions from which orthogonal ball motions can be reconstructed.

18. (Unchanged) The method of claim 17 wherein the storing step includes storing as the data coordinates representing the directions from which the orthogonal ball motions can be reconstructed.

19. (Unchanged) The method of claim 11 wherein the storing step includes storing an indication of a set of the motion data and a default location for a start of the corresponding motion.

20. (Unchanged) The method of claim 11 wherein storing step includes using an atomic resolution storage memory for storing the data.

Please add the following claims:

21. (Added) The electronic pen of claim 1, wherein the circuit is capable of varying the rate at which the sensor is sampled based upon the motion of the ball.

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22. (Added) The electronic pen of claim 1, further comprising:

a first switch for turning on and off the circuit;

a second switch for enabling a user to store in the memory a reset indication to start storing data related to the motion of the ball from a default location stored in memory; and

wherein:

the sensor comprises an X-position sensor and a Y-position sensor located within the pen body proximate the ball, and the X-position sensor and a Y-position sensor remotely sense ball motion by movement of features on the ball; and

the circuit further comprises a timer for determining the particular rate at which the sensor is sampled, and wherein the circuit is capable of varying the rate at which the sensor is sampled based upon the motion of the ball.

23. (Added) The method of claim 11, further including the step of changing the rate at which the sensor is sampled based upon the motion of the ball.